**Application No.:** 

10/827,074

Filing Date:

April 19, 2004

## AMENDMENTS TO THE CLAIMS

Please amend Claims as follows. Insertions are shown <u>underlined</u> while deletions are <del>struck through</del>.

1-10 (canceled):

11 (currently amended): An electrochemical cell which comprises a cathode containing a proton-conducting organic compound as an electrode active material, an anode containing a proton-conducting organic compound as an electrode active material and an electrolyte containing a proton source, wherein the cathode is an electrode comprising a proton-conducting organic compound and an anion-exchange resin, the anion exchange resin contained only in a surface layer of the electrode, the anion-exchange resin being a fiber with a length of 10 mm or less and a major axis of 100 µm or less, and wherein the electrolyte is an aqueous solution containing a proton-ionizing electrolyte.

12 (previously presented): The electrochemical cell as claimed in Claim11, wherein the electrochemical cell is operable such that as a charge carrier, protons are exclusively involved in a redox reaction of the active materials associated with charge/discharge in both electrodes.

13 (previously presented): The electrochemical cell as claimed in Claim11, wherein the electrolyte is an acid-containing aqueous solution.

14 (canceled):

15 (currently amended): A storage device comprising an electrochemical cell which comprises a cathode containing a proton-conducting organic compound as an electrode active material, an anode containing a proton-conducting organic compound as an electrode active material and an electrolyte containing a proton source,

wherein the cathode in the electrochemical cell is an electrode comprising a proton-conducting organic compound and an anion-exchange resin, the anion exchange resin contained only in a surface layer of the electrode, the anion-exchange resin being a fiber with a length of 10 mm or less and a major axis of 100 µm or less,

wherein the electrolyte is an aqueous solution containing a proton-ionizing electrolyte, and

wherein a plurality of the electrochemical cells are electrically connected.

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16 (previously presented): The storage device as claimed in Claim15, wherein the electrochemical cells are connected in series.

17 (original): The storage device as claimed in Claim 16, wherein the electrochemical cells are stacked.

18 (previously presented): The storage device as claimed in Claim15, wherein the electrochemical cell is operable such that as a charge carrier, protons are exclusively involved in a redox reaction of the active materials associated with charge/discharge in both electrodes.

19 (previously presented): The storage device as claimed in Claim 15, wherein the electrolyte in the electrochemical cell is an acid-containing aqueous solution.

20 (canceled):

21 (currently amended): The electrochemical cell as claimed in claim 11, wherein the proton-conducting organic compound of the cathode is a proton-conducting  $\pi$ -conjugated organic compound.

22 (currently amended): The electrochemical cell as claimed in claim 11, wherein the proton-conducting organic compound of the cathode is a  $\pi$ -conjugated indoletrimer compound.

23 (currently amended): The storage device as claimed in claim 15, wherein the proton-conducting organic compound of either or both of the anode and the cathode is a proton conducting  $\pi$ -conjugated organic compound.

24 (currently amended): The storage device as claimed in claim 15, wherein the proton-conducting organic compound of either or both of the anode and the cathode is a  $\pi$ -conjugated indoletrimer compound.